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GAMING SYSTEM WITH WAGER LOCATION

Field of the Invention

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This invention relates to a gaming system and, more particularly, to a gaming system that can be used by a plurality of players to play any one of a selection of available games on which wagers may be placed. The invention extends to a method of operation of the gaming system.

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Background to the Invention

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Gaming systems are known that enable a plurality of players to play separate instances of a game of chance. Each player is able to place a wager on each turn of his own particular instance of the game. An outcome of the turn of the game is determined by the system and displayed to the player and the system settles the wager as a function of the outcome according to the rules of the game of chance being played.

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Such prior art gaming systems may be, at a simplest level, one or more stand-alone gaming machines that can be located in a land-based casino or some other entertainment venue such as a betting shop. In this instance, the turnover and gross win arising from each gaming machine may be recorded manually and logged by an operator of the gaming system. In another prior art gaming system, the plurality of gaming machines located at the entertainment venue may each be linked by means of a local-area network ("LAN") to an administration facility that automatically records the financial performance of each gaming machine. It is also known to extend this latter type of topology outside the confines of a single entertainment venue and to have gaming machines that are geographically dispersed, some of which may be located in rural or disadvantaged areas. In this

- 5 particular topology, the gaming machines are linked to the administration facility by means of a wide-area network ("WAN").

It is a disadvantage of such prior art gaming systems that the financial performance of the system can only be determined and analysed to a resolution
10 that corresponds to each individual gaming machine. It is desirable to analyse the performance of a gaming system according to criteria other than individual gaming machine.

15 Object of the Invention

It is an object of this invention to provide a gaming system, and a method of operation of a gaming system that will, at least partially, alleviate the abovementioned difficulties and disadvantages.

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Summary of the Invention

- In accordance with this invention there is provided a gaming system, comprising:
- 25 a gaming server;
a plurality of player stations remote from the gaming server, each player station being capable of rendering to a player a simulation of at least one game of chance and enabling the player to place a wager on a turn of the at least one game of chance; and
- 30 a communication network capable of providing communication between the gaming server and the plurality of player stations characterised in that
- the gaming server records transaction data relating to each wager placed by any player on each turn of the at least one game of chance, the transaction data
35 including at least the size of the wager, the time and date of the wager, an outcome of the turn of the game of chance, a geographic location of the player

5 station on which the wager was placed by the player, and a status of the wager, the status being successful if the outcome of the turn of the game is a favourable outcome, and the status being unsuccessful if the outcome of the turn of the game is not a favourable outcome.

10 Further features of the invention provide for each player station to have a unique identification code, for the geographic location of any player station to be stored in a player station database associated with the gaming server, the player station database being indexed according to the unique identification codes of the plurality of player stations, and for the gaming server to derive the geographic
15 location of any player station from the player station database by means of the unique identification code of that player station as an index.

Still further features of the invention provide for the gaming server to maintain a register of all players who utilise the gaming system to play the at least one game
20 of chance, for the register to store, for each player, a player identity and a corresponding unique code of at least one player identification token, for the player identification token to be any one of an identification card, a driver's licence, a credit card or a debit card, and for each player terminal to require any player to be identified before commencing play of the at least one game of
25 chance, the transaction data relating to any wager including an identity of the player who placed that wager.

Yet further features of the invention provide for the gaming system to include an administration facility communicable with the gaming server by means of the
30 communication network, the administration facility being configurable to determine at least one of:

(a) a total gross win or loss for each individual player in the register; and
(b) a total gross win or loss for each one of the plurality of player stations of the gaming system, and for the administration facility to be still further configurable to
35 determine at least one of:

- 5 (c) a gross win or loss for all player stations whose geographic location falls within a selectable geographical area; and
(d) a total gross win or loss for all the player stations together.

10 There is further provided for the administration facility to accumulate, in an accumulation account, a proportion of all wagers placed by any player on any of the plurality of player stations whose geographic location falls within a selectable geographic area, and for the administration facility to reimburse, out of the contents of the accumulation account, a community in the selectable geographic area in respect of the gross loss at all player stations whose
15 geographic location falls within the selected geographic area, alternatively for the administration facility to reimburse the community in respect of a total of all wagers placed at any player station whose geographic location falls within the selected geographic area.

20 There is further provided for any player station to accept wagers in one of a number of different standard wager denominations, each one of the number of different standard wager denominations being a predetermined integral or fractional number of units of credit, for the player station database to store, for each player station, a corresponding standard wager denomination for wagers
25 placed by the player at that player station, and for the administration facility to derive the wager denomination of any particular player station from the player station database by means of the unique identification code of that player station as an index.

30 There is still further provided for each player station to have a processor and a display monitor on which the simulation of the at least one game of chance is rendered to the player, for the player station to have any one or more of a coin acceptor, a banknote validator, a keypad and a printer, and for the communication network to be the Internet.

5 The invention extends to a method of operation of a gaming system, comprising the steps of:

providing a gaming server, a plurality of player stations remote from the gaming server, and a communication network capable of providing communication between the gaming server and the plurality of player stations ;

10 rendering to a player, on a player station, a simulation of at least one game of chance;

enabling the player to place a wager on the turn of the at least one game of chance at the player station;

determining an outcome of the turn of the at least one game of chance; and

15 recording transaction data relating to each wager placed by the player on the turn of the at least one game of chance, the transaction data including at least the size of the wager, the time and date of the wager, an outcome of the turn of the game of chance, a geographic location of the player station on which the wager was placed by the player, and a status of the wager, the status being successful
20 if the outcome of the turn of the game is a favourable outcome, and the status being unsuccessful if the outcome of the turn of the game is not a favourable outcome.

There is also provided for assigning a unique identification code to each player
25 station, for storing a geographic location of any player station in a player station database, the player station database being indexed according to the unique identification codes of the plurality of player stations, and for deriving the geographic location of any player station from the player station database by means of the unique identification code of that player station as an index.

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There is further provided for maintaining a register of all players who utilise the gaming system to play the at least one game of chance, for storing, for each player in the register, a corresponding player identity and a corresponding unique code of at least one player identification token, and for requiring a player to be
35 identified before commencing play of the at least one game of chance, and

- 5 including in the transaction data relating to any wager, an identity of the player who placed that wager.

There is still further provided for configuring the gaming system to determine at least one of:

- 10 (a) a total gross win or loss for each individual player in the registry; and
(b) a total gross win or loss for each one of the plurality of player stations of the gaming system, and for still further configuring the gaming system to determine any one of
(c) a gross win or loss for all player stations whose geographic location falls
15 within a selectable geographical area; and
(d) a total gross win or loss for all the player stations together.

- There is yet further provided for accumulating, in an accumulation account, a proportion, preferably three percent, of all wagers placed by any player on any
20 one of the plurality of player stations whose geographic location falls within a selected geographic area, for reimbursing, out of the contents of the accumulation account, a community in the selected geographic area in respect of the gross loss at all player stations whose geographic location falls within the selected geographic area, alternatively for reimbursing the community in respect
25 of a total of all wagers placed at any player station whose geographic location falls within the selected geographic area.

- There is also provided for accepting wagers in one of a number of different denominations, each one of the number of different denominations being a
30 number of predetermined integral or fractional number of units of credit, for storing, for each player station, a corresponding denomination for wagers accepted at that player station, and for deriving the wager denomination of any particular player station from the player station database by means of the unique identification code of that player station as an index.

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Brief Description of the Drawings

A preferred embodiment of the invention is described below, by way of example only, and with reference to the accompanying drawings, in which:

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Figure 1 is schematic diagram of a gaming system according to the invention; and

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Figure 2 is a schematic representation of a player station of the gaming system of Figure 1.

Detailed Description of the Invention

20 Referring to Figure 1, a gaming system is indicated generally by reference numeral (1).

This embodiment of the invention will be described with particular reference to a game of chance that is a single-player 3-reel video slots game. It is to be clearly
25 understood, however, that the invention extends to include the use of other types of single-player games of chance, such as video poker, for example.

The gaming system (1) includes a gaming server (2), and a plurality of player stations (3); only one of which is shown, located remotely from the gaming server
30 (2). Communication between the player stations and the gaming server (2) is provided by means of a communication network (4) that is, in this embodiment, the Internet. Each player station (3) includes an Internet-enabled processor (5), a display monitor (6), a numeric keypad (7), a pushbutton panel (8), a coin acceptor (9), a banknote validator (10) and a thermal printer (11). The Internet-
35 enabled processor (5) operates under a Windows XT operating system, which is well known and commercially available from the Microsoft Corporation of Seattle,

- 5 Washington, USA. The gaming server (2) operates under the Windows NT operating system, which is also a product of the Microsoft Corporation.

The gaming system (1) enables a player to play a game of 3-reel video slots at any one of the player stations (3). A number of different players may play the
10 game of video slots simultaneously, with each player playing from a different player station (3). It is anticipated that the player stations (3) would be placed at different locations throughout a geographic region, such as entertainment venues, shopping centres, games arcades, cinemas, night clubs, betting shops and the like. Each player station (3) is identified by a unique identification code
15 and the geographical location of each player station is known. The geographical location need not be known accurately by means of geographical co-ordinates, but merely at the level of village, or town and suburb, district, region and province.

- 20 The gaming system (1) includes, further, an administration facility (14) in the form of an application web server, which is communicable with the gaming server (2) by means of the communication network (4). The detailed operation of the application web server (14) will be outlined in the description that follows.

- 25 The Internet-enabled processor (5) in each player station (3) executes a respective client process (12) in the form of a computer program that renders to a player a simulation of the three-reel video slots game on the display monitor (6) of the player station. The gaming server (2) executes a server process (13), which is a further computer program that generates random events that
30 determine the outcome of turns of the video slots game. The operation of the client and server processes (12 and 13) will be described in greater detail in the description that follows. The server process (13) generates, upon request of the client process (12), a random event that determines the outcome of a turn of the video slots game, in particular, the outcome of a spin of the reels of the three-reel
35 video slots game in the player's particular turn of the game. The client process (12) of the particular player station (3) obtains the result of the random event from

5 the gaming server (2), along the communication network (4), and displays the outcome of the turn of the game to the player on the display monitor (6) of the player station (3) in an intelligible manner, by simulating on the monitor an animation of three spinning reels that come to rest at appropriate indexed positions corresponding to the generated outcome.

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The client process (13) also allows the player to make a wager on a turn of the game of video slots, and to effect decisions that determine the progress of the game, by using appropriate buttons on the pushbutton panel (8) of the player station (3). In this particular embodiment, the pushbutton panel button has
15 buttons labelled "BET 1", "BET MAX" and "SPIN", respectively. The use of these pushbuttons, which is the same as that found in a conventional, freestanding slot machine is well known in the art and will not, for this reason, be described here in detail.

20 The gaming server (2) maintains a register, or player database (15), of players who have used the gaming system (1) to play the game of video slots. The player database (15) contains, for each player, an identity of the player, a corresponding unique code of an identification token belonging to the player, and a corresponding credit account balance. The player identification token can be
25 any one of an identification card, a driver's licence, a credit card or a debit card, the only requirement being the uniqueness of the code of the player's identification token. In order to utilise the gaming system (1) to play the game of video slots, a player is required to first identify himself or herself before being allowed to commence wagering and playing at a player station (3). A first-time
30 user of the gaming system (1) is required to complete a registration process and have his particulars added to the player database (15) before such a player is eligible to commence wagering and play. The player database (15) is indexed by player identification code.

35 The client process (12) of a player station (3) enables a player to place a wager on a turn of the three-reel slots game by means of the "BET 1" and "BET MAX"

5 buttons on the pushbutton panel (8). The wagers placed by players utilising the gaming system (1) are made with credit purchased by such players prior to their participation in the game. For this purpose, a player may purchase credit by inserting coins in the coin acceptor (9) of a player station (3) and by inserting banknotes into the banknote validator (10) of the player station. Whenever a
10 player purchases credit in this manner, the gaming server (2) credits that player's credit account balance in the player database (15) with an amount equivalent to the quantity of credit purchased by the player. The player's credit balance is displayed on the display monitor (6) of the player station (3) at all times during a player's playing session. Each player station (3) accepts wagers in only one
15 denomination. Various standard wager denominations are supported by the gaming system (1), each standard denomination being an integral or a fractional number of units of credit. In this particular embodiment, the standard wager denominations are 0.25, 0.5, 1, and 5 units of credit.

20 The gaming server (2) also maintains a player station database (17) that contains player station data corresponding to each player station (3) in the gaming system (1). The player station data includes the unique identification code of a player station (3), a standard wager denomination of the player station, and a corresponding geographical location of that player station. The player station
25 database (17) is indexed by player station identification code.

The server process (13) in the gaming server (2) is capable of determining whether any wager placed by any player on a turn of the three-reel video slots game is successful or unsuccessful according to the rules of the game. In
30 particular, once a player has placed a wager on a turn of the game, and the gaming server has determined a corresponding outcome of that turn of the game, the server process determines whether the wager is successful or unsuccessful in the following manner: the game of video slots has a plurality of possible outcomes, of which one or more may be favourable outcomes with the remainder
35 being unfavourable outcomes. Each one of the favourable outcomes causes the player to win a prize of a corresponding quantity of credit. The gaming server (2)

5 determines the status of a wager to be successful if the outcome of the turn of the game is a favourable outcome, and unsuccessful if the outcome of the turn of the game is not a favourable outcome. The gaming server (2) settles each successful player wager by crediting the credit account of the player by an amount of credit equivalent to the prize won by the player.

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A player can terminate his playing session by activating a "CASHOUT" button on the pushbutton panel (8) of his player station, whereupon the client process (12) of the player station causes a bar-coded ticket to be printed on the thermal printer (11) of the player station. The player can then present the bar-coded ticket to an operator of the gaming system (1) and exchange it for monetary value equivalent to the balance of the credit in the player's credit account.

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The gaming server (2) also maintains a transaction database (16) of transaction data relating to any wager on the game by any player at any player station (3). The transaction data includes, for each turn of the game, a player identification code of the player, a size of the wager, a time and date when the turn of the game occurred, a player station identification code of a player station (3) at which the player is playing, an outcome of the turn of the game, a status of the wager, the status being successful if the outcome of the turn of the game is a favourable outcome, and unsuccessful if the outcome of the turn of the game is not a favourable outcome, and a corresponding prize won by the player if the status of the wager is successful.

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The application web server (14) executes a management information software program (18), which can be configured to analyse the transaction data in the transaction database (16) and to produce management reports according to the needs of particular application. In particular, the management information software program (18) can be configured to produce a report on net wins or losses per player in the player register, per single player station (3), per group of player stations whose geographical location falls within a selected geographic area, or for the gaming system (1) as a whole. It will be appreciated by those

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5 skilled in the art that it will be necessary for the application web server (14) to interrogate, via the gaming server (2), the contents of each of the player database (15), the transaction database (16) and the player station database (17) to produce management reports of the type mentioned above.

10 The management information software program (18) of the application web server (14) can also be configured to accumulate a proportion, in this embodiment 3%, of all player wagers in an accumulation account (not shown). The contents of the accumulation account (not shown) may be utilised by an operator of the gaming system (1) for purposes of social responsibility. As an
15 illustration, the management information software program (18) may be configured to report on net win for all player stations falling within a predetermined underprivileged area, and the operator of the gaming system (1) may elect to reimburse the underprivileged community out of the social responsibility account for all losses incurred by any players at player stations
20 falling within the underprivileged area. It will be further appreciated by those skilled in the art that the management information software program (18) may also be configured to produce reports for the purpose of making fiscal payments to a competent tax authority.

25 Numerous modifications are possible to this embodiment without departing from the scope of the invention. In particular, the game of chance offered for play by the gaming system (1) may be a game of video poker or video blackjack instead of the game of video slots described above. Alternatively, gaming system (1) may offer a plurality different of games for play at any player station (3), a player being
30 able to select, from a menu, any one of the available games for play. Further, a touch screen may replace the display monitor (6) on each display station (3), permitting the pushbutton panel on each display station to be dispensed with. Still further, the player identification code may be issued by an operator of the gaming system (1) instead of being derived from a player identification token. Yet further,
35 the system may be such as to require a player to purchase credit at a player station (3) by means of a payment token such as a credit card or a debit card,

- 5 instead of by means of coins or banknotes as described above. As a further alternative, a player may be required to purchase credit from a vending station. It is envisaged that, in this scenario, the player would be presented with a voucher encoded with an amount of credit purchased by the player, and the player would then transfer the credit to the player's credit account by keying in the voucher
- 10 code by means of the numeric keypad (7) on the player station (3). Finally, the application web server (14) may be configured to derive game statistics from the transaction database (16) that can be used to verify the performance, stability and fairness of any game offered by the gaming system (1).
- 15 The invention therefore provides a gaming system that enables the determination of wins and losses by players according to geographic location and that permits the implementation of social responsibility projects for disadvantaged communities.